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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/317,124	05/24/1999	DANIEL E. HINTON SR.	00479.77772	8668

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EXAMINER

ZAND, KAMBIZ

ART UNIT	PAPER NUMBER
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2132

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DATE MAILED: 07/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/317,124

Applicant(s)

HINTON SR. ET AL.

Examiner

Kambiz Zand

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 May 1999.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-159 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-159 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2-4,7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

1. **Claims 1-159** have been examined.

***Information Disclosure Statement PTO-1449***

2. The pages of the all references submitted by applicant have been considered.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 25-159 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In view of the wording of the claims language and the large number of claims, which render it difficult to determine the matter for which protection is sought. In Page 1, line 19 through page 2, line 11 of the specification has clear language that reflects itself in claims 1-24 of the Application but do not relate itself to claims 25-159. Examiner

request corrections or clarifications in light of contents of page 1, line 19 through page 2, line 11 of the specification.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

6. Claims 25-159 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Page 1, line 19 through page 2, line 11 of the specification states "the present inventors have discovered a technique for modulating the transmitting signal in a manner that results in much faster signal stability, thus reducing the amount of time required to synchronize the receiver and increasing the modulation bandwidth dramatically". However Examiner has difficulty relating claims 25-159's language to the above remarks in the specification. Examiner for the purpose of examination would consider claims 25-159 as means to reach the above remarks in the specification.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-159 are rejected under 35 U.S.C. 102(b) as being anticipated by Pinknet et al (Chaos shift keying communications system using self-synchronization chua oscillators; Electronic letters. Vol.31, no.13; 22 June 1995; pages 1021-1022) recited in the IDS by Applicant.

Pinknet et al disclose a method, a chaotic transmitting circuit, a non-linear circuit element, a chaotic communication system, a chaotic receiver and transmitter, a chaotic telephone device, a method of demodulating a signal modulated according to a chaotic trajectory shift-keying technique, an apparatus and a method of recovering information transmitted through a communication channel wherein generating a chaotic carrier signal that causes oscillation of a voltage about first equilibrium point and changing in response to an information signal a non reactive resistive value in the circuit, shifting to a shifted first equilibrium point in the current-voltage phase space and oscillating between two equilibrium points wherein the current-voltage comprising of three linear segments and all limitations of claims 4-159 (see page 1021-1022, in specific left hand col. of page 1021).

9. Claims 1-159 are rejected under 35 U.S.C. 102(b) as being anticipated by Tao Yang Chua (secure communication via chaotic parameter modulation; IEEE transactions on circuits and systems; vol.43, no.9; September 1996; pages 817-819) recited in the IDS by Applicant.

Tao Yang Chua disclose a method, a chaotic transmitting circuit, a non-linear circuit element, a chaotic communication system, a chaotic receiver and transmitter, a chaotic telephone device, a method of demodulating a signal modulated according to a chaotic trajectory shift-keying technique, an apparatus and a method of recovering information transmitted through a communication channel wherein generating a chaotic carrier signal that causes oscillation of a voltage about first equilibrium point and changing in response to an information signal a non reactive resistive value in the circuit, shifting to a shifted first equilibrium point in the current-voltage phase space and oscillating between two equilibrium points wherein the current-voltage comprising of three linear segments and all limitations of claims 4-159 (see page 817-819).

10. Claims 1-159 are rejected under 35 U.S.C. 102(b) as being anticipated by Cuomo (5,291,555) recited in the IDS by Applicant.

Cuomo disclose a method, a chaotic transmitting circuit, a non-linear circuit element, a chaotic communication system, a chaotic receiver and transmitter, a chaotic telephone device, a method of demodulating a signal modulated according to a chaotic trajectory shift-keying technique, an apparatus and a method of recovering information transmitted through a communication channel wherein generating a chaotic carrier signal that causes oscillation of a voltage about first equilibrium point and changing in response to an information signal a non reactive resistive value in the circuit, shifting to a shifted first

equilibrium point in the current-voltage phase space and oscillating between two equilibrium points wherein the current-voltage comprising of three linear segments and all limitations of claims 4-159 (see abstract;fig.1-6 and col.3-4).

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

11. Claims 1-159 are rejected under 35 U.S.C. 102(e) as being anticipated by Tresser et al (6,064,701 A) recited in the IDS by Applicant.

Tresser et al disclose a method, a chaotic transmitting circuit, a non-linear circuit element, a chaotic communication system, a chaotic receiver and transmitter, a chaotic telephone device, a method of demodulating a signal modulated according to a chaotic trajectory shift-keying technique, an apparatus and a method of recovering information transmitted through a communication channel wherein generating a chaotic carrier signal that causes oscillation of a voltage about first equilibrium point and changing in response to an information signal a non reactive resistive value in the circuit, shifting to

a shifted first equilibrium point in the current-voltage phase space and oscillating between two equilibrium points wherein the current-voltage comprising of three linear segments and all limitations of claims 4-159 (see abstract;fig.2-8 and col.3-7).

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. **Claims 1-159** are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admittance of Prior Art (AAPA).

As per claims 1-159 Applicant admits in the specification page 1 and page 2, lines 1-5 that the modulations of carrier signals for transmission of information between two points is well known including chaotic signal (Also see fig.1a-d; 2b;6a-b) but states "the present inventors have discovered a technique for modulating the transmitting signal in a manner that results in much faster signal stability, thus reducing the amount of time required to synchronize the receiver and increasing the modulation bandwidth dramatically". Examiner refers Applicant to the following remarks:

It is noted that the features upon which applicant relies (i.e., the present inventors have discovered a technique for modulating the transmitting signal in a manner that results in much faster signal stability, thus reducing the amount of time required to synchronize the receiver and increasing the modulation bandwidth dramatically) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Therefore by Applicant's admittance in absent of the above limitations in the claim language the claims 1-159 only states the prior art as Applicant has mentioned in page 1 and 2 of the specification.

### **Conclusion**

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

U.S.Patent No. US (5,379,346 A) teach cascading synchronized chaotic systems.

U.S.Patent No. US (5,473,694 A) teach synchronization of nonautonomous chaotic systems.

U.S.Patent No. US (5,729,607) teach non-linear digital communications system.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kambiz Zand whose telephone number is (703) 306-4169. The examiner can normally reached on Monday-Thursday (8:00-5:00). If attempts

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to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (703) 305-1830. The fax phone numbers for the organization where this application or proceeding is assigned are as follows:


After-Final (703) 746-7238

Official (703) 746-7239

Non-Official/Draft (703) 746-7240

Kambiz Zand

  
07/13/03

  
JUSTIN T. DARROW  
PRIMARY EXAMINER